

In the claims:

For the Examiner's convenience, all pending claims are presented below with changes shown in accordance with the mandatory amendment format.

1. (Currently Amended) An apparatus comprising:

a card rack; and

two or more server node cards ~~coupled to~~ mounted on the card rack, each server node card including:

a server node to perform ~~server functions with~~ integrated switching, routing, load balancing, and fail-over functions; and

a plurality of ports coupled with each server node, wherein at least one port to directly connect to another server node card in the card rack and at least one port to connect to an external connection to another card rack including other server node cards;
and

an interface card mounted on the card rack separate from the two or more server node cards, the interface card to provide the external connection to the another card rack and to provide a connection to an external network, wherein the interface card to connect to each of the server node cards in the card rack via interconnections to at least one of the ports of each of the server node cards.

2. (Currently Amended) The apparatus of claim 1, wherein the server node card and the interface card each comprise~~[[s]]~~ a single printed circuit board.

3. (Original) The apparatus of claim 1, where the plurality of ports comprises four ports.

4. (Original) The apparatus of claim 2, wherein the printed circuit board is rack mountable and the plurality of ports are accessible as connection points on the card rack.

5. (Currently Amended) A server block comprising:

a plurality of server node[[s]] cards, each server node card including:

a server ~~with to perform~~ integrated switching, routing, load balancing and fail-over functions; and

a plurality of ports, ~~at least one port of the plurality of ports configured to directly connect to another server node card and at least one port of the plurality of ports configured for to connect[[ion]] to an external network connection to another server block including a plurality of other server node cards;~~ and

~~a plurality of signal paths connected with to couple the plurality of ports of the server nodes, at least two of the plurality of ports of each server node connected with the another server node card and with the external connection; and of the plurality of server nodes in the server block.~~

~~an interface card mounted on the server block separate from the server node cards, the interface card to provide the external connection to the another server block and to provide a connection to an external network, wherein the interface card to connect to each of the server node cards in the server block via interconnections to at least one of the ports of each of the server node cards.~~

6. (Currently Amended) The server block if claim 5, wherein each said server node card ~~of the plurality of server nodes and the interface card each comprise[[s]]~~ one printed circuit board.

7. (Previously Presented) The server block of claim 6, wherein the printed circuit board is rack mountable and the plurality of ports of each server node are accessible as connection points on the card rack, and the server block is constructed in one card rack by interconnecting the connection points on the card rack.

8. (Cancelled).

9. (Currently Amended) A computer network comprising:

a plurality of server blocks wherein each server block comprises:

a plurality of server nodes, each server node including:

a server with to perform integrated switching, routing, load balancing, and fail-over functions; and

plurality of ports, at least two ports of the plurality of ports configured to directly connect to at least two other server nodes of the plurality of server nodes in the server block and at least one port configured to provide an external connection to another server block including a plurality of other server node cards; and

plurality of signal paths to connected with the plurality of ports with the other server nodes and with the another server block of each server node, at least one signal path connected with each server node of the plurality of server nodes providing an external connection to a server block, and at least two signal paths connected with each server node of the plurality of server nodes being connected with other server nodes of the plurality of server nodes in the block; and

plurality of signal paths connected with the server blocks, at least one signal path connected with each server block of the plurality of server blocks to provide providing an

external connection to the network, and at least two signal paths connected with each server block ~~of the plurality of server blocks being to connect[[ed]]~~ with other server blocks of the plurality of server blocks; and
an interface card mounted on the server block separate from the server nodes, the interface card to provide the external connection to the another server block and to provide the external connection to the network, wherein the interface card to connect to each of the server nodes in the server block via interconnections to at least one of the ports of each of the server nodes.

10. (Currently Amended) The computer network of claim 9, wherein each server node ~~of the plurality of server nodes and the interface card each comprise[[s]]~~ one printed circuit board.

11. (Previously Presented) The computer network of claim 10, wherein the printed circuit board is rack mountable and the plurality of ports of each server node are accessible as connection points on the card rack, and a server block is constructed in one card rack by interconnecting the connection points on the card rack.

12.-20. (Cancelled)

21. (New) The apparatus of claim 1, wherein to perform routing functions further includes:
receiving a request at the server node card;
determining whether to service the request; and
if unable to service the request, routing the request to another server node card coupled with the server node card in the card rack.

22. (New) The apparatus of claim 21, wherein to perform load balancing functions further includes:

determining the present load of one or more other server node cards coupled with the server node card in the card rack; and

routing the request to a server node card of the one or more other server node cards with the smallest load.

23. (New) The server block of claim 5, wherein to perform routing functions further includes:

receiving a request at the server node card;

determining whether to service the request; and

if unable to service the request, routing the request to another server node card coupled with the server node card in the server block.

24. (New) The server block of claim 23, wherein to perform load balancing functions further includes:

determining the present load of one or more other server node cards coupled with the server node card in the server block; and

routing the request to a server node card of the one or more other server node cards with the smallest load.

25. (New) The computer system of claim 9, wherein to perform routing functions further includes:

receiving a request at the server node;

determining whether to service the request; and

if unable to service the request, routing the request to another server node coupled with the server node in the server block.

26. (New) The computer system of claim 25, wherein to perform load balancing functions further includes:

determining the present load of one or more other server nodes coupled with the server node in the server block; and

routing the request to a server node of the one or more other server nodes with the smallest load.